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ABSTRACT

The results of the administration of the Preschool Language Scale to two succeeding classes of Head Start children (N 174) in a large, heterogeneous school district are reported. The scale is an individually administered instrument divided into receptive and expressive language areas. All children were administered the Preschool Language Scale, Peabody Picture Vocabulary Test, and Caldwell Preschool Scale at the beginning of the school year, while retest results are available for the initial class. On entry into the Head Start program, the children scored on the average at the dull normal level on all three measures. While the Preschool Language Scale gives much more useful detail than do the others, the comparable mean scores indicate that these children are similar to typical Head Start children and that the new scale is a suitable measure. Means, standard deviations, correlations, and item analyses, which provide validity information for those considering the adoption of this scale, are presented. (Author/KM)

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VALIDITY AND EVALUATION OF THE PRESCHOOL LANGUAGE SCALE

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ABSTRACT

Some form of evaluation is a requirement for all governmental sponsored preschool programs. This has led to a search for available instruments which meet the criteria of speed and simplicity of administration, age suitability, validity, and at least some degree of culture fairness. Since evaluation instruments are limited at this age level, the publication of the Preschool Language Scale (Charles E. Merrill Publishing Company, 1969) is particularly noteworthy.

Basically, this scale consists of an individually administered instrument fractionated into receptive and expressive language areas. Administration time appears to be within one-half hour, and the detailed manual allows for administration (under supervision) by experienced preschool personnel such as teachers and speech therapists. Items can be translated for administration to the non-English speaking child.

This paper reports the results of the administration of the Preschool Language Scale to two succeeding classes of Head Start children (N 174) in a large and hetrogeneous school district. All children were administered the Preschool Language Scale, Peabody Picture Vocabulary Test, and Caldwell Preschool Scale at the beginning of the school year, while retest results are available for the initial class.

On entry into the Head Start program, the children score on the average at the dull normal level on all three measures. While the Preschool Language Scale gives much more useful detail than do the others, the comparable mean scores indicate that these children are similar to typical Head Start children, and that the new scale is a suitable measure.

This paper will report means, standard deviations, correlations, and item analyses which provide validity information for those considering the adoption of this scale.

VALIDITY AND EVALUATION OF THE PRESCHOOL LANGUAGE SCALE

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Assessment and evaluation of a child's language development are among the most important tasks of those concerned with preschool programs. These tasks assume priority for the following reasons:

First, the ability to use language as a tool for learning and communication of knowledge is an essential component of the learning process.

Second, the early identification of specific strengths or deficiencies permits the development of a realistic and meaningful language program.

This need for early assessment of language development has led to a search for available instruments which meet the criteria of speed and simplicity of administration, age suitability, reliability, validity, and some degree of culture fairness. Since evaluation instruments are limited at this age level, the publication of the Preschool Language Scale (PLS), is, we hope, particularly noteworthy.

This scale consists of an individually administered instrument based on developmental and multidimensional language norms, which extends and elaborates recent findings in linguistic and communication theory. Administration time appears to be within one-half hour, and the detailed manual allows for administration (under supervision) by experienced preschool personnel such as teachers and speech therapists. For non-English speaking children items can be translated.

The Preschool Language Scale is designed to provide for the evaluation of a child's language developmental status in the first seven years of life. The two major dimensions of the scale, Auditory Comprehension and Verbal Ability, are considered to be complementary, each making a distinctive contribution to language assessment.

The Auditory Comprehension Scale is designed to assess auditory discriminations, and the ability to respond to these. Such aspects as grammar, number sense, logical thinking, self-concept, time-space, and memory are tapped. Results of the administration of the Auditory Comprehension Scale are expressed as an Auditory Language Age and can be converted to a quotient.

The Verbal Ability Scale is designed to provide a measure of the degree of expression, both in the sense of adequacy of articulation and in terms of verbal communication. This scale is inevitably pegged to the auditory, in that it is necessary to hear in order to verbalize. Nevertheless, children comprehend far more than they are able to express. The scale serves to equate for this normal process which is often overlooked by those who deal with children. Among the qualities tapped are grammar, number sense, logical thinking, self-concept, time-space, memory, and articulation.

The present edition of the Preschool Language Scale, published in 1969, is composed of items drawn from child development literature, which are placed

METHOD

This paper reports the results of the administration of the Preschool Language Scale to two succeeding classes of Head Start children (N 174), and a comparison of the early forms of the scale in predicting later school success.

Subjects included in the present study represent the population of twelve Head Start classes in a middle size, rural-urban center, ranging in age from three years, nine months through five years. All subjects were enrolled in an academic year program which ran from September through June.

Initial testing, completed during the first two weeks of school attendance, consisted of the Peabody Picture Vocabulary Test, administered by the District psychologists, and the Preschool Language Scale, administered by teachers under supervision. At the close of the school year, the same procedure was followed, and retest results are available for the 1968-69 school year. Means, standard deviations, and correlations have been calculated, and split-half reliability is presented.

RESULTS

I. Reliability

The reliability of the Preschool Language Scale has been assessed by use of a split-half reliability coefficient. To do this, the auditory and verbal sections were each divided into two parts of equal length. Because of the makeup of the scale, mutually dependent items could be grouped on the same half of each scale, thus assuring independence of the test halves and avoiding spuriously high coefficient correlations. Consequently, the internal consistency of the scale may actually be slightly underestimated by this process, since in assuring independence, differentiation of the two halves tends to be increased.

Split-half reliability coefficients obtained in this manner for two consecutive years of entering fall classes, with appropriate correction for full length of the test by the Spearman-Brown formula, ranged from a low of .79 to a high of .92 with a median of .88.

II. Means and Standard Deviations

In Table I the initial (fall) 1968 and 1969 means and standard deviations are given for boys and girls separately.

For boys the auditory comprehension means are almost identical (88) for the two different samples

For girls the means are 94 and 89 respectively, slightly, but not significantly, surpassing the boys.

When the Verbal Ability means are compared, again the boys' samples are remarkably stable (82). Girls continue to surpass the boys slightly, but not significantly, with means of 92 and 88 for the two samples.

These results are consistent with Stanford Binet IM means reported for Head Start samples in recent studies (for example, a mean of 87 reported in the 1962 study of Gray).

III. Peabody Picture Vocabulary Test

A portion of the 1968 sample and all of the 1969 sample were also given the Peabody Picture Vocabulary Test (PPVT), which allows a measure of concurrent validity of the PLS. Results are presented in Table II.

For the two fall samples, the PPVT ranges from a low of 74 to a high of 87 without consistent sex differences. In three of the four fall samples, the PLS scores surpass the PPVT. Again, mean scores of the PPVT are consistent with those reported in the literature for Head Start classes, while the tendency for this "single" language measure of word recognition to be lower than the multidimensional approach PLS has also been noted of PPVT - Binet comparisons.

IV. Item Analysis

In Chart I an item analysis for boys versus girls (Pafi, 1968) allows a comparison of the discrimination value of the items at ascending language age levels. Generally item difficulty advances sequentially with age, providing greatest discrimination at the three and one-half and four-year level, consistent with both the chronological age of four years and the lagging language development so typical of these children.

A further evaluation of item discrimination based on a comparison of the highest versus the lowest 27% indicates excellent differentiation on almost all items in the critical range.

V. Prediction of School Success

In 1966 an initial version of the PLS, focusing on verbal skills, was given to Head Start children. A year later, following completion of kindergarten, the Lee Clark Reading Readiness Test was administered by the District psychologist. When children rated on the earlier language measure are compared on the later Lee Clark, 65% are correctly identified by the language measure.

Less than 10% who scored average or better on the PLS were later to score below average on the Lee Clark. On the other hand, 27% scoring low on the early version of the PLS were later to succeed on the reading measure.

For comparison, the Fall, 1967, sample given the full PLS and the PPVT can be compared on the basis of their later Lee Clark scores. Results (Table III) show that for boys the PLS-A correctly predicts 84% on the auditory scale and 80% on the verbal scale as compared to a prediction of 59% on the PPVT. For girls, however, both PPVT and PLS-A correctly identify 75%, while the verbal scale was only slightly better at 77%.

TABLE 1

PRESCHOOL LANGUAGE SCALE SCORES FOR HEAD START CLASSES

FALL 1968					FALL 1969				
		M	SD				M	SD	
BOYS - N 50	AC	88.4	20.03	r .66	BOYS - N 37	AC	88.3	15.7	r .69
	VA	82.1	20.82			VA	82.3	18.1	
GIRLS-N 36	AC	93.9	13.80	r .69	GIRLS-N 30	AC	89.2	17.5	r .77
	VA	92.3	16.68			VA	86.2	16.4	

TABLE II

PRESCHOOL LANGUAGE SCALE AND PEABODY PICTURE VOCABULARY TEST

	TEST Fall 1968		RETEST Spring 1969		TEST Fall 1969	
	M	SD	M	SD	M	SD
BOYS - N 33					N 37	
PLS-Auditory	82.2	17.59	102.4	16.37	88.3	15.7
PLS-Verbal	79.0	20.27	97.1	20.37	82.3	18.1
PPVT	74.1	18.21	90.7	20.71	87.3	14.8
GIRLS - N 19					N 47	
PLS-Auditory	96.0	14.69	117.7	15.28	89.2	17.5
PLS-Verbal	96.6	18.63	115.2	12.52	86.2	16.4
PPVT	87.2	16.71	102.6	14.18	80.1	17.0

TABLE III

PREDICTING READING READINESS
Initial Form of Preschool Language Scale

		Lee Clark Reading Readiness			
		Average or Above		Below Average	
		N	%	N	%
Experimental Preschool Language Scale	Average or above	21	47%	4	9%
	Below Average	12	27%	8	18%

PREDICTING READING READINESS
Revised Form of Preschool Language Scale and
Peabody Picture Vocabulary Test

		Lee Clark Reading Readiness			
		Average or Above		Below Average	
		N	%	N	%
BOYS					
PLS-Auditory	Average or above	19	58%	1	3%
PLS-Verbal		18	54%	1	3%
PPVT		11	33%	1	3%
PLS-Auditory	Below Average	4	12%	9	26%
PLS-Verbal		5	15%	9	26%
PPVT		12	36%	9	26%
GIRLS					
PLS-Auditory	Average or Above	18	50%	4	11%
PLS-Verbal		19	52%	4	11%
PPVT		21	58%	7	19%
PLS-Auditory	Below Average	5	14%	9	25%
PLS-Verbal		4	11%	9	25%
PPVT		2	6%	6	17%